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Electronic Newsletter

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The Perinatal Network News is a publication of the Department of Health and Mental Hygiene's (DHMH) Center for Maternal and Child Health (CMCH). It is funded through a Crenshaw Perinatal Health Initiative grant provided to the Montgomery County Health Department.

The publication is intended as a communication tool for sharing perinatal information for a statewide audience, with information and resources that address statewide issues. It is designed as a vehicle to encourage collaboration and networking throughout the state. The newsletter provides an opportunity to share information on preconception and perinatal health issues and priorities, infant morbidity and mortality, county statistical trends and perinatal and child health indicators. It is an opportunity for local programs to share their strengths and insights as well as opportunities to ask for feedback and assistance in solving a local problem.

To ensure that this newsletter is a success, we need and encourage your participation. Please let us know of any items you would like to contribute, if you have suggestions for topics or areas you would like to see covered, or if you see that incorrect information was provided or that important information was inadvertently left out.

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Perinatal network

Maryland Department of Health and Mental Hygiene

The Only Constant is Change

Jeanne L. Brinkley, MPH, CNM, Chief, MCH Systems Improvement and MCH Consultant, Maryland Department of Health and Mental Hygiene

Maureen C. Edwards, MD, MPH, Medical Director, CMCH, retired August 31, 2006. Twenty four hours later she and her spouse headed due west in their RV. Watching her prepare to depart was to stand in a whirlwind of meetings, plans, "reassignments," and well wishers. Dr. Edwards has a passion for moms and kids as evidenced by the volumes of work she accomplished. She presented most of us on the Center for Maternal and Child Health (CMCH) perinatal staff with a large pile of work to continue in her absence.

Her accomplishments include:

- ▲ Advocating for the MCH community,
- ▲ Finding ways to understand Maryland's African American infant mortality rate and ways to improve these statistics.
- ▲ Identifying, illuminating and developing awareness among public health and health providers, of the impact of health disparities on maternal infant and child health outcomes. She has particularly challenged us in this area by showing the number of African-American infants dying yearly is equal to the enrollment in a typical elementary school. Will any of us who have had the privilege of hearing Maureen passionately speak about infant mortality health disparities ever look at an elementary school in the same light? Surely we will think of lost opportunities, perplexing public health challenges and that Maryland is a 'poorer' state because of those infants lost to health disparities. Disparities work will be continued by Yvette L. McEachern Acting Chief, Community Initiatives and Partnerships.
- ▲ Working with the Lead Commission and with the Coalition to End Childhood Lead Paint Poisoning to eliminate the scourge of lead poisoning in Maryland's children.
- ▲ Forming the Breastfeeding Task Force and working to assure the Right to Breastfeed assisted by Mary D. Johnson, State Breastfeeding Coordinator,
- ▲ Concentrating on data from CMCH's three surveillance review programs: FIMR, CFR, and MMR.
- ▲ Developing policy and legislative efforts for moms and babies.
- ▲ Ensuring that CMCH and the local health departments collect data, data and more data, and then use it to support MCH initiatives.

Dr. Edwards promoted the Perinatal Network newsletter as a valuable resource for the MCH/Perinatal community. The newsletter began as a county level

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Crenshaw project to communicate with a multidisciplinary audience of 1500 recipients in Montgomery County. It was so successful that in its fifth year the CMCH expanded the focus from county specific to statewide distribution plus the inclusion of information formerly published in "Focus on FIMR." Dissemination of timely information that affects Maryland practitioners, moms and babies, and those working in perinatal health is the main goal of this publication. The newsletter is practice oriented and covers areas that cut across disciplines including those of neonatology, nursing, nutrition, social work, nurse-midwifery, medicine, and consumer issues.

Maureen's inspiration guided the formation of an editorial board, which is comprised of a multidisciplinary group of experts who understand the perinatal needs and problems in Maryland. Board expertise will provide additional input and planning for future issues of this newsletter. The roles of the Board include: identify important issues for practice in Maryland and key articles in the literature, build professional and community networks to funnel information regarding the Perinatal Network, solicit articles from colleagues, write articles, and help create future issues of continuing quality and timely release of four issues per year.

The editorial board represents many different areas of expertise, including perinatal health, infectious diseases in pregnancy, racial/ethnic disparities, nursing and patient education, health policy, neonatology, SIDS/respiratory control, genetics and newborn screening.

The new CMCH newsletter staff is Jeanne L. Brinkley, managing editor and Christine Evans, copy editor. Jody Joy continues her role as editor and together we plan to actively assist and encourage the Editorial Board to create a newsletter to exceed Dr. Edwards' vision and provide timely information to the perinatal community.



Healthy New Moms: Maryland's Campaign To End Depression During and After Pregnancy

Christine McKee, Deputy Director, Mental Health Association of Maryland

The Mental Health Association of Maryland received a grant from the U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau to develop and implement a public information and provider education campaign on perinatal depression to promote mental and physical wellness in new mothers and their families.

Healthy New Moms: Maryland's Campaign To End Depression During and After Pregnancy seeks to increase knowledge of the signs and symptoms of perinatal depression, educate health providers and women of childbearing age of the treatment options, encourage screening and facilitate treatment referrals.

The campaign's Advisory Board, consisting of women who experienced perinatal depression, health providers, representatives from culturally diverse groups and state and local government agencies, provided guidance in the development of educational materials and outreach strategies.

The campaign will launch in July with the distribution of provider education packets with information on signs and symptoms, treatment options, available resources, and the uploading of the campaign website, www.healthynewmoms.org. A brochure providing information on symptoms and treatment of perinatal depression will be distributed to pregnant and postpartum women statewide.

A media campaign will begin later this summer that will promote the campaign web site and the Perinatal Depression help line, 1-800-PPD-MOMS, as resources. The helpline is available 24-7 and is staffed by trained counselors to assist women with resource and referral information.

As part of the outreach, local mental health organizations are conducting focus groups with women who've experienced perinatal depression. Other local organizations will be educating providers and women in their communities. Dr. Diana Cheng, who is working closely with the campaign, will be providing provider trainings at Ground Rounds and conferences around the state.

For more information and to order campaign materials, please call Christine McKee at 410-235-1178 x 203, or go to www.healthynewmoms.org.



Family Planning Clinics' Potential for Improving Women's Mental Health and Well-Being

"Considering Interventions for Depression in Reproductive Age Women in Family Planning Programs" explores family planning programs as possible sites for incorporating interventions related to depression, including screening and treatment, in women of reproductive age.

The policy brief, produced by the Women's and Children's Health Policy Center at the Johns Hopkins Bloomberg School of Public Health, reviews the literature and presents ideas from the author's direct experience in the family planning field and from key informant interviews on interventions for depression within family planning settings.

Topics include an overview of different types of depression, the prevalence of depression among women in the United States, selected consequences of depression at different points in the lifecourse, commonly used depression-screening tools, and the potential for integrating primary care services into family planning programs. Issues to consider, potential interventions, recommendations for future action, and a conclusion are also presented.

The policy brief is available by going to: <http://www.jhsph.edu/> and putting the title of the brief in the search box on the far right column.



Ten Steps to Successful Breastfeeding: An underutilized approach for improving breastfeeding rates

Hanan Aboumatar, MD, MPH. Maryland Breastfeeding Coalition

'Ten Steps to Successful Breastfeeding' is an action framework for breastfeeding promotion and support within the healthcare system. It is an evidence-based, 'best practices' approach demonstrated to improve breastfeeding initiation and continuation rates in the United States (USA) and worldwide. The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) developed this framework in 1980 and the USA Department Of Health And Human Services called for its nationwide adoption in USA hospitals in 2000.

The 'Ten Steps' aim at providing adequate support for breastfeeding mothers in the hospital setting and after discharge. The 'Ten Steps' intervene at the critical points required for establishing adequate milk supply.

The Ten Steps are:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within one hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants.
6. Give newborn infants no food or drink other than breast milk, unless medically indicated.
7. Practice "rooming in" by allowing mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats, pacifiers, dummies, or soothers to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birthing center.

While national breastfeeding rates continue to be well behind the Healthy People 2010 goals with significant racial disparities, implementation of the 'Ten Steps' in United States' maternity facilities continue to be poor. A national survey of 1085 women show that only seven percent of surveyed mothers report experiencing five of the 'Ten Steps' in their maternity facilities. The practices measured were steps 4, 6, 7, 8, and 9. Barriers to 'Ten Steps' implementation include lack of healthcare leadership knowledge and commitment, lack of incentives for implementation, inadequate medical provider education, low levels of staff education and training, and reliance on free or discounted formula. (Merewood and Philipp, 2000) (Merewood and Philipp, 2001) (Wright, Rice and Wells, 1996) (Breastfeeding Canada, 2002).

Though full implementation of the 'Ten Steps to Successful Breastfeeding' involves significant organizational changes within the healthcare facility, the majority of the steps are within the control of the individual healthcare professional. Providing education for all new mothers on the benefits of breastfeeding, and securing that baby gets put to the breast within first hour of birth and gets fed on demand are well within the control of the nurses in birthing facilities. So is encouraging that baby stays in his mother's room as long as possible and refraining from formula supplementation unless medically indicated.

Given the current knowledge of breast milk benefits, and as strong advocates of infants and children's health, it is our responsibility to strive towards implementation of the 'Ten Steps' in our work settings as much as possible, and to encourage our colleagues to do so.



Anne Arundel County Launches Healthy Babies Initiative

Peter Gelzinis, Division of Health Information and Promotion, Anne Arundel County Department of Health

The Anne Arundel County Department of Health, under the leadership of Health Officer Frances B. Phillips, R.N., M.H.A, launched a new Healthy Babies Initiative with a Healthy Babies Summit held on August 18-19, 2006.

The initiative began when the Department of Health noticed significant disparities in the infant mortality rate and related factors among the county's African-American population. The summit brought together over 80 community leaders, health care professionals, social service agencies, and government officials with the goal of raising awareness of infant mortality and the associated health disparities that exist in the county's African-American population. Participants began developing an action plan to improve the county's birth outcomes and they were also asked to join a county-wide Healthy Babies Coalition.

The first evening of the Healthy Babies Summit focused participants' attention on the problem. Karen Fedor, an Annapolis resident, told her moving story of regaining hope after losing her only son to stillbirth. Dr. Katherine Farrell, Deputy Health Officer for Anne Arundel County, and Dr. Jinlene Chan, Physician Clinical Specialist for the Department of Health, shared infant mortality data compiled over recent years from throughout the county. Their presentation revealed that the highest rates of infant mortality and associated risk factors such as teenage pregnancy, tobacco use, and low birth weight were concentrated in the northern and western parts of the county while other problems related to older mothers and alcohol use were concentrated in the central part of the county. Summit participants also heard from Dr. Maureen Edwards,

Medical Director of the Center for Maternal and Child Health at the Maryland Department of Health and Mental Hygiene, who provided a broad survey of infant health and racial disparities in Maryland.

Some of the statistics were striking. For example: while Maryland's median family income ranked 5th in the United States, the state ranked 40th in infant mortality. Participants benefited from the perspectives of Nia Williams, R.N., M.P.H., and Brenda Lockley, R.N., M.S., who oversee Black Babies S.M.I.L.E., a program that resulted from the efforts of a community based coalition built in Montgomery County. Black Babies S.M.I.L.E. relies on a staff of nurses who make frequent home visits to pregnant women and new mothers to ensure they get the care they need.

On the second day, summit participants returned for small group and large group discussions to identify key factors that could make a difference to pregnancy outcomes. The groups then prioritized the issues, with lack of education and health literacy determined to be the most urgent issue. Summit participants felt that young black women often do not have proper information regarding nutrition, smoking and alcohol cessation, safe sleep practices, and breast feeding. Participants worked together to develop goal statements based on the key issues and potential action steps to achieve each goal. By the conclusion of the Summit, the majority of those who attended had signed up to join the Healthy Babies Coalition.

The Coalition, to be officially launched in late September, will continue the work begun at the Summit. Through collaboration and the leveraging of resources, the Healthy Babies Coalition will be able to develop and implement a comprehensive strategic plan to

improve the health and well being of women and infants in the county.

The Coalition will also help guide the Department of Health's multimedia health promotion and risk reduction campaign to improve maternal and infant health. Additionally, the Department of Health has partnered with the Zeta Phi Beta Sorority, the March of Dimes, and Baltimore Washington Medical Center to open a Stork's Nest in Anne Arundel County.

The Stork's Nest is a free prenatal education program that teaches women how to have a healthy pregnancy and baby. The Stork's Nest uses a point-based incentive system to encourage women to participate in the program. Women earn points by attending the Stork's Nest classes, going to prenatal care appointments, and participating in other healthy activities. Women continue to earn points by taking their baby to well baby check-ups and breast feeding. The points can be used to buy infant care items from the Stork's Nest Store. The Stork's Nest classes will begin in September.

If you would like to learn more about the Healthy Babies Initiative, please contact Laurie Fetterman, M.S.W., Health Planner, Division of Health Information and Promotion, Anne Arundel County Department of Health at (410) 222-7203 or hdzett00@aacounty.org.



Preventing Perinatal HIV Transmission through Provider Education

Elizabeth Liebow, Coordinator, Perinatal Infections Outreach Program, Project Director, Baltimore Regional Perinatal Advisory Group, Baltimore County Department of Health

- ✿ Maryland ranked fourth in the nation for annual AIDS cases reported in 2004;
- ✿ Between 200 and 225 HIV-positive women give birth each year in Maryland; and
- ✿ Of post-partum women surveyed in October 2005 in Maryland, 16 percent said that no health care provider had talked with them about HIV during pregnancy.

Each case of perinatal HIV infection stands as a sentinel event and represents a missed opportunity for prenatal, intrapartum or postpartum HIV testing and prophylaxis. To help assure that all pregnant women know their HIV status, providers must make HIV counseling and testing a universal, routine part of preconception and prenatal care. In order to assist obstetrics practitioners in providing the standard of care for their patients as set forth in the Public Health Service Guidelines and endorsed by the American College of Obstetricians and Gynecologists, The American Academy of Pediatrics, the American Academy of Family Physicians and the American College of Nurse Midwives, a comprehensive toolkit was produced by the Baltimore Regional Perinatal Advisory Group (RPAG), a project of the Perinatal Infections Outreach Program, Baltimore County Department of Health. The toolkit was funded by several Administrations within the Maryland Department of Health and Mental Hygiene, and by MedChi, the Maryland State Medical Society.

The RPAG is an independent body whose goal is to optimize the health of pregnant women and newborn infants in the Baltimore region through education, advocacy and information sharing. RPAG members are public and private sector clinicians and public health officials from Baltimore County, Baltimore City, Carroll County, Frederick County, Harford County, and Howard County. RPAG members also represent hospital departments of Obstetrics, Neonatology, Nursing, and Infection Control; community-based health centers; Medicaid managed care organizations; the state health department; MedChi, and other national- and state-level professional and advocacy associations

The toolkits include information on: local, state, and national epidemiology; consent; disease reporting; consensus guidelines; screening/treatment/management guidelines; rapid testing in labor and delivery; counseling support materials for providers; consultation and referral resources for providers of positive patients; and numerous other resource listings. Most of the documents in this toolkit are available on the Web site of the Perinatal Infections Outreach Program/RPAG at www.baltimorecountymd.gov/go/perinatal. The documents will be available shortly as .pdf files and will be updated on an on-going basis.

Toolkits have been distributed to obstetrics providers in the six RPAG jurisdictions: Baltimore County; Baltimore City; Carroll County; Frederick County; Harford County and Howard County. With on-going support from the Maryland Department of Health and Mental Hygiene, the provider outreach project is being expanded state-wide. In addition, a patient education campaign is currently being designed to promote HIV testing in pregnancy. Educational materials and incentive items will be provided to pregnant women across the state.

For more information, contact Elisabeth Liebow, RPAG Project Director, at eliebow@co.ba.md.us.

New AIDS Administration Director for Maryland

Heather Hauck has been appointed Director of the Department of Health and Mental Hygiene's (DHMH) AIDS Administration by DHMH Secretary S. Anthony McCann. Heather Hauck brings strong and varied experience to the job of Director of the AIDS Administration and has an extensive background in HIV/AIDS from both the treatment and the administrative side.

For three years, Ms. Hauck was the Section Chief of the New Hampshire Department of Health and Human Services, Division of Public Health STD/HIV Section. During this time, she led New Hampshire's public health efforts to prevent and treat sexually transmitted diseases and HIV/AIDS (Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome). She also initiated and led a statewide effort to redesign HIV care delivery to proactively manage expected reductions in funding, and both wrote and managed grants from the Centers for Disease Control and Prevention, and the Health Resources and Services Administration.

Ms. Hauck was the Social Work Supervisor for Washington Hospital Center in Washington D.C., where she co-authored and administered a grant for funds to support outpatient primary care for HIV/AIDS patients. She also led the Social Work Department's participation in emergency preparedness and bio-terrorism preparedness initiatives.

The AIDS Administration, established in 1987 as a division of DHMH, leads public health initiatives regarding HIV, the virus that causes AIDS. The Administration supports programs in education, prevention, health and social services. The AIDS Administration funds services for persons with HIV disease or AIDS, operates MADAP (Maryland's AIDS Drug Assistance Program) and health insurance premium payment assistance programs, educates the public and health care professionals about HIV and AIDS, and monitors the disease in Maryland. In addition, the AIDS Administration conducts program evaluation, health services research, and analysis and surveillance of the epidemic.

Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings

Department of Health and Human Services, Centers for Disease Control and Prevention

Summary

These recommendations for human immunodeficiency virus (HIV) testing are intended for all health-care providers in the public and private sectors, including those working in hospital emergency departments, urgent care clinics, inpatient services, substance abuse treatment clinics, public health clinics, community clinics, correctional health-care facilities, and primary care settings. The recommendations address HIV testing in health-care settings only. They do not modify existing guidelines concerning HIV counseling, testing, and referral for persons at high risk for HIV who seek or receive HIV testing in nonclinical settings (e.g., community-based organizations, outreach settings, or mobile vans). The objectives of these recommendations are to increase HIV screening of patients, including pregnant women, in health-care settings; foster earlier detection of HIV infection; identify and counsel persons with unrecognized HIV infection and link them to clinical and prevention services; and further reduce perinatal transmission of HIV in the United States. These revised recommendations update previous recommendations for HIV testing in health-care settings and for screening of pregnant women. (CDC Recommendations for HIV testing services for inpatients and outpatients in acute-care hospital settings. MMWR 1993;42[No. RR-2]:1-10; CDC Revised guidelines for HIV counseling, testing, and referral. MMWR 2001;50[No. RR-19]:1-62; and CDC Revised recommendations for HIV screening of pregnant women. MMWR 2001;50[No. RR-19]:63-85).

Major revisions from previously published guidelines are as follows:

For patients in all health-care settings.

- ☐ HIV screening is recommended for patients in all health-care settings after the patient is notified that testing will be performed unless the patient declines (opt-out screening).
- ☐ Persons at high risk for HIV infection should be screened for HIV at least annually.
- ☐ Separate written consent for HIV testing should not be required; general consent for medical care should be considered sufficient to encompass consent for HIV testing.
- ☐ Prevention counseling should not be required with HIV diagnostic testing or as part of HIV screening programs in health-care settings.

For pregnant women.

- ☐ HIV screening should be included in the routine panel of prenatal screening tests for all pregnant women.
- ☐ HIV screening is recommended after the patient is notified that testing will be performed unless the patient declines (opt-out screening).
- ☐ Separate written consent for HIV testing should not be required; general consent for medical care should be considered sufficient to encompass consent for HIV testing.
- ☐ Repeat screening in the third trimester is recommended in certain jurisdictions with elevated rates of HIV infection among pregnant women.

Download the full report: <http://www.cdc.gov/hiv/topics/testing/resources/reports/pdf/rr5514.pdf>

Morbidity and Mortality Weekly Report, Recommendations and Reports
September 22, 2006 / Vol. 55 / No. RR-14

Policy Forum on HIV Testing for Pregnant Women—Webcast Available

This event sponsored by the Association of Maternal and Child Health Programs and the American College of Obstetricians and Gynecologists examines the 10-year history of HIV/AIDS testing in pregnant women, including a broad illustration of policy development and implementation.

To access the webcast, go here: www.kaisernetwork.org/health_cast/hcast_index.cfm?display=detail&hc=1732



Resource Available

Here is a link to a new Kaiser Family Foundation issue brief "HIV Testing in Pregnant Women."

The pdf version of downloadable at:

http://www.kaisernetwork.org/health_cast/uploaded_files/HIV_Testing_in_Pregnant_Women.pdf

Influenza in Pregnancy

Joseph Baker, MD, MPH, Johns Hopkins General Preventive Medicine Program

Background

Over the past two years, a large degree of media attention has been focused on pandemic and avian influenza. This information comes from disparate sources and often times the content is conflicting; consequently, there is a large degree of uncertainty and fear among Maryland residents. It is unclear if and when the next influenza pandemic will occur. However, if a pandemic should occur, proper planning is essential to optimally mitigate its deleterious effects. Even if a pandemic does not strike in the near future, planning is valuable because the framework developed for pandemic planning can be applied to other emergency situations e.g., natural disasters. This document seeks to summarize what is currently known about pandemic and avian influenza and the unique issues regarding pregnant women.

Pandemic and Avian Influenza

An influenza pandemic is global spread of the influenza virus in the context of limited human immunity. It is important to realize that pandemic influenza is distinct from the seasonal flu that we are all familiar with. In contrast to the seasonal flu for which most humans have some degree of immunity, humans have limited innate immunity to pandemic influenza viruses; consequently, the severity of illness is greater with pandemic influenza infection.

Influenza pandemics have occurred three times in the past 100 years: in 1918, 1957, and 1968. Estimates suggest that the 1918 pandemic may have resulted in the deaths of 40-60 million people globally. Many in the scientific community believe that our planet is overdue for another pandemic. The H5N1 avian influenza virus currently circulating in Asia is the most likely pandemic candidate at present. To date, the majority of

human cases of avian influenza have been among individuals living in close contact with birds (e.g., poultry farmers), and the transmission pattern has been from bird to human. There have been a few instances of possible human to human transmission, but so far sustained human to human transmission has not been seen. If the virus mutates (generally, a random event) to allow more efficient human to human transmission, then a pandemic becomes more likely.

Unique issues for pregnant women

During past pandemics, pregnant women have had disproportionately high morbidity and mortality rates. During the 1918 and 1957 influenza pandemics, mortality rates among infected pregnant women were very high. This is not true with the usual seasonal flu. However, the CDC recommends that all women who are or will be pregnant during the influenza season (i.e., October to May in the Northern Hemisphere) should be vaccinated against influenza.

The CDC also recommends using inactivated trivalent influenza vaccine (live-attenuated influenza vaccine is contraindicated in pregnancy) at any time during gestation. Similarly, the current American College of Obstetrics and Gynecology (ACOG) recommendations for use of influenza vaccine in pregnancy are the same as those from CDC. (These recommendations are different than previous CDC/ACOG recommendations that recommended vaccine in the second and third trimester only.) Furthermore, influenza vaccine has been shown to be safe for both mother and fetus in pregnancy. However, vaccination rates among pregnant women are low and estimated to be approximately 12 percent.

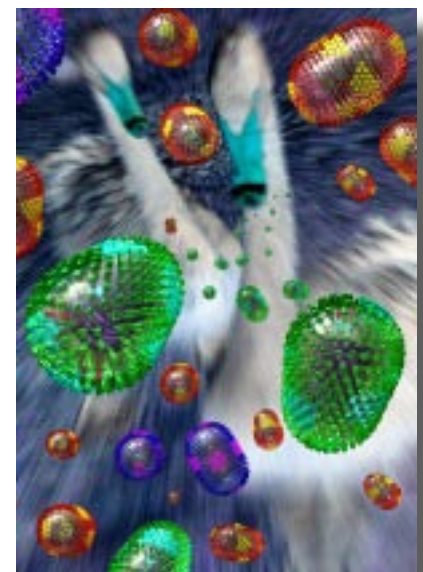
A recent study in Obstetrics and Gynecology showed that hospitalized pregnant women with influenza-like illness have longer lengths of stay and higher odds of delivery complications than hospitalized pregnant women without such illness. A cost-effective analysis in the same journal issue concluded that vaccination of 100 percent of pregnant women with

influenza vaccine during pregnancy would save around \$50 per woman, resulting in a net gain of around 45 quality-adjusted hours relative to supportive care only.

Conclusion

There are unique issues for pregnant women in the context of pandemic and seasonal influenza. Given that pregnant women seem to be disproportionately affected, it is important and appropriate to target this patient population to optimally mitigate the effects of influenza when considering the population as a whole. Current vaccination rates among pregnant women are low and need to be increased; this is because of the following: 1) influenza causes increased morbidity and mortality among pregnant women; 2) influenza vaccine is safe and effective during pregnancy; and 3) higher vaccination rates among pregnant women appear to be cost-effective. Given these reasons, public health authorities should target interventions to increase vaccination rates of this vulnerable population.

Please see current CDC/ACIP recommendations for prevention and control of influenza at www.cdc.gov/mmwr/PDF/rr/rr55e628.pdf.



Opportunities with AWHONN

*Jacalyn Mitchell, Clinical Nurse Specialist, Maternal Child Health,
Johns Hopkins Bayview*

What if an organization existed that offered all of the following benefits:

- ❖ Two journals on the latest research and activities in women's and infant's health,
- ❖ access to your local legislators,
- ❖ national networking opportunities,
- ❖ up-to-date, evidence-based practice resources,
- ❖ opportunities to participate in multi-site, practice-based research projects, and
- ❖ a framework for developing state-of-the-art practice and unit policies and procedures.

If all of this sounds like a dream come true, then check out The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) at www.AWHONN.org. The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) serves and represents over 22,000 health care professionals in the U.S., Canada and abroad. Headquartered in Washington, D.C. AWHONN is considered a leader among national nursing organizations.

The primary mission is promoting the health of women and newborns by focusing on three distinct areas: childbearing and the newborn, women's health across the lifespan, and professional issues facing today's healthcare providers.

The AWHONN was originally formed within the American College of Obstetricians and Gynecologists (ACOG) as the Nurses Association of the American College of Obstetricians and Gynecologists (NAACOG) in 1969. In 1993, the NAACOG separated from ACOG and became the independent organization known as AWHONN. There are now members in all 50 states, Canada and abroad, including chapters representing members of the Armed Forces.

Membership is open to RNs, LPNs, students and anyone interested in the health of women and newborns. RNs may obtain a regular membership at a cost of \$149 per year. LPNs and other interested parties may obtain an associate membership for \$132. Special memberships for students, and those who are disabled or retired are available for \$75 per year and international memberships for anyone are \$175 per year.

The next Maryland chapter meeting was held on Tuesday, October 17, 2006. It will be held at Holy Cross Hospital and the subject was Hypertension in Pregnancy.

Networking opportunities are also available at the annual convention held every June. The 2006 convention—Innovate, Lead, Care, was held in Baltimore and had over 2000 attendees. The 2007 convention will be in sunny Orlando, Florida.

Practice resources and standards, consulting services, research grants, health policy and legislative programs, and consumer education are just a few more of the benefits of membership.

If you are involved with the care of women and newborns, please check out AWHONN membership as a way to improve your practice. More information is available on the Web site at www.AWHONN.org. You can also contact Member Services at 800-673-8499, ext. 2445/2450 or send an e-mail to customerservice@awhonn.org. We look forward to seeing you at our next meeting.



Innovate, Lead, Care

AWHONN serves more than 22,000 health care professionals in the U.S., Canada and abroad. We provide our members with the latest information and the highest quality resources to help them be the innovative, caring leaders that patients need as health care providers and advocates who promote the health of women and newborns. We hope you'll visit our web site often to stay up-to-date on AWHONN's work, the resources we offer and the issues we follow.

AWHONN's theme for 2006 is Innovate. Lead. Care. For nearly four decades, AWHONN has worked to celebrate and increase the power of nursing. Nurses are uniquely positioned to improve our nation's health and our nation's health care system. This year we are working to make an even greater difference—in hospitals, in community health centers, in consulting rooms, in the halls of power on Capitol Hill and in the states and in the lives of newborns, women and their families.

Extracted from AWHONN's "Welcome from the President" message.



Infant Death Risk Higher in Voluntary C-Sections Than Vaginal Births

Infant and neonatal mortality rates are higher with voluntary caesarean sections than with vaginal births, according to a study published in the September issue of the journal *Birth: Issues in Perinatal Care*. Marian MacDorman, a CDC statistician, and colleagues examined data on 5,762,037 live births and 11,897 infant deaths from 1998 through 2001 in the U.S. to assess the risk of death for infants and neonates as a result of voluntary c-sections among women with no indicated complications. Higher mortality rates associated with c-section deliveries previously have been attributed to higher risk factors of the pregnant woman. According to the researchers, the study is the first of its kind to assess the risks of c-section delivery among women who voluntarily undergo the procedure. C-section births in the U.S. increased from 20.7 percent in 1996 to 29.1 percent in 2004.

Study Findings

The study finds that neonatal and infant mortality rates were 1.77 per 1,000 infants delivered via voluntary c-section, compared with 0.62 per 1,000 infants delivered vaginally (MacDorman et al., *Birth: Issues in Perinatal Care*, 9/5). Researchers said that the higher mortality rates among voluntary c-section deliveries could be because vaginal labor releases hormones that promote healthy lung functioning. According to the researchers, the physical compression of the infants during vaginal birth helps to eliminate fluid from the lungs and prepares the infants to breathe.

Researchers also suggested that possible cuts to the infants during a c-section or delayed establishment of breast-feeding might account for the increased death rate. The researchers said the study is limited by the accuracy of medical data reported on birth certificates. Michael Malloy, a co-author of the article and a professor of pediatrics at the University of Texas Medical Branch, said, "Despite attempts to control for a number of factors that might have accounted for a greater risk in mortality associated with c-sections, we continued to observe enough risk to prompt concern," adding, "When obstetricians review this information, perhaps it will promote greater discussion within the obstetrical community about the pros and cons of offering c-sections for convenience and promote more research into understanding why this increased risk persists."

According to MacDorman, "Neonatal deaths are rare for low-risk women—on the order of about one death per 1,000 live births—but even after we adjusted for socioeconomic and medical risk factors, the difference persisted."

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Preterm Birth: Causes, Consequences, and Prevention

The Institute of Medicine of the National Academy of Sciences has released a new report brief.

In 2005, 12.5 percent of births in the United States were preterm, at less than 37 weeks gestation. This high rate of premature births in the United States constitutes a public health concern that costs society at least \$26 billion a year.

Preterm Birth: Causes, Consequences, and Prevention notes troubling disparities in preterm birth rates among different racial and ethnic groups. Despite great strides in improving the survival of infants born preterm, little is known about how preterm births can be prevented. The report recommends a multidisciplinary research agenda aimed at improving the prediction and prevention of preterm labor and better understanding the health and developmental problems to which preterm infants are more vulnerable.

In addition, the report recommends that guidelines be issued to further reduce the number of multiple births—a significant risk factor for preterm birth—resulting from infertility treatments.

Download the report here: <http://www.iom.edu/CMS/3740/25471/35813/35975.aspx>

Doula Service Offered at Holy Cross

Patricia Keating, R.N., Manager of Perinatal Education, Holy Cross Hospital

In an effort to continue to provide excellent care to their maternity patients, Holy Cross Hospital has been offering a birth doula service for the past three years. This program provides its clients with a birth doula who will work exclusively with them to provide support during labor and the immediate postpartum period.

Doula refers to a professionally trained supportive companion who provides physical, emotional, and informational support to laboring women and their partners during labor and birth. The doula's role emphasizes continuous support and non-medical coping assistance.

A doula can help in many ways:

She provides emotional support by helping with relaxation techniques, encouraging a positive attitude, guiding mom through rough moments, and by reassuring and encouraging her partner. She provides physical support by suggesting positions and strategies to enhance labor progress or minimize discomfort. A Doula also provides informational support by describing common interventions and procedures, explaining the labor process to the family and support team and facilitating communication between mom and her medical care team. Doula services are provided for a fee of \$550, much lower than the rates for private doulas in the Washington, DC area. Moms receive a Prenatal Planning and Information Packet. The packet contains information, exercises and a format for creating her Labor Coping Plan. Once registered, the mom can call the doula warm-line to talk to a doula and ask questions. Mom contacts the doula on call when she goes into labor. The doula will provide support to mom and family over the phone during early labor and in person during her entire labor once she is admitted to the hospital.

Families can learn more about the doula program by attending an open house. The open house is also an opportunity for those who have registered for the service to meet with a doula and work on her labor coping plan. Doula Open Houses are held from 7 p.m. to 9 p.m. on the 2nd Wednesday and from 2 p.m. to 4 p.m. on the third Saturday of each month at Holy Cross Hospital at 1500 Forest Glen Road, Silver Spring, Maryland.

For more information, please contact Patricia Keating at 301-754-7163, or keatip@holycrosshealth.org



Easier Access to Information and Materials on SIDS and Infant Death

The National SIDS/Infant Death Resource Center has launched a new feature on its Web site, providing access to electronic versions of print publications (fact sheets, brochures, booklets, and posters) and information on materials in other formats (CDs, DVDs, and videotapes). The information was collected from national, state, and local SIDS/infant death programs, as well as from perinatal, stillbirth, maternal and child health, and bereavement organizations. Materials, organized alphabetically by topic, are available at <http://www.sidscenter.org/Topics.aspx?heading=TopicsA-Z>. Organizations wishing to participate in the project are encouraged to submit links to electronic materials at: <http://www.sidscenter.org/biblio/>

Major Congenital Malformations After First-Trimester Exposure to ACE Inhibitors

Angiotensin-converting enzyme (ACE) inhibitors are a type of blood pressure medication used to treat high blood pressure (also known as hypertension) and congestive heart failure. ACE Inhibitors block an enzyme in the body that causes blood vessels to tighten. This allows blood vessels to relax thereby lowering blood pressure and increasing the supply of blood and oxygen to the heart. Twenty-five years ago, the FDA approved the first ACE Inhibitor, Captopril, which was one of the most successful drugs ever marketed. ACE inhibitors are the most widely prescribed blood pressure medication in the United States. ACE inhibitors, long known to be teratogenic when used in the last two trimesters of pregnancy, have been considered safe in the first trimester. However, this assumption has been based on relatively limited data. The findings of this study are the first to link first-trimester use of the drugs with adverse birth outcomes.

The FDA-supported epidemiologic study conducted by William O. Cooper, M.D., M.P.H., and his colleagues and reported in the June 8, 2006 issue of the New England Journal of Medicine studied 29,507 infants enrolled in a Tennessee Medicaid program, born between 1985 and 2000, and for whom there was no evidence of maternal diabetes.

Of the 29,507 infants, 411 infants were exposed to high blood pressure medicine only in the first trimester. Of these, 209 had been exposed only to ACE inhibitors in the first three months. The other 202 had been exposed to other high blood pressure medicines in the first trimester. That left 29,096 who had not been exposed to high blood pressure medicine of any kind during their development. Major congenital malformations were identified from linked vital records and hospitalization claims during the first year of life and confirmed by review of medical records. Overall, infants exposed to ACE inhibitors in the first trimester had nearly triple the risk of such defects as those who were not exposed to any antihypertensive medication (RR 2.71; 95 percent CI; 1.724.27). In absolute terms, malformations occurred in 2.63 percent of births among women not exposed to any antihypertensive drugs, compared to 7.12 percent of births in which the mother was exposed to ACE inhibitors. By way of contrast, exposure to antihypertensive drugs other than ACE inhibitors did not increase the threat of malformations.

Major birth defects (congenital malformations) were diagnosed in 856 infants. Of these, 203 had more than one defect. Of the larger group, 305 had heart malformations, 195 had defects of the skeleton, 119 had defects in formation of the gastrointestinal tract, 83 had central nervous system defects including defects in development of the brain, and 82 had malformation of the urologic system including the kidneys.

The study's authors, led by William O. Cooper, of Vanderbilt, concluded that "exposures to ACE inhibitors during the first trimester of pregnancy cannot be considered safe and should be avoided." These data present a problem for pregnant women and their clinicians who must decide how to deal with existing chronic conditions and a patient's pregnancy. This concern is based on the fact that for many drugs, teratogenicity has not been well-studied.

Source: Cooper W.O. et al. Major congenital malformations after first-trimester exposure to ACE inhibitors. New England Journal of Medicine, 2006 Jun 8; 354:2443-51.



Home Visiting-A Promising Strategy to Improve Birth Outcomes Among MCH Populations

“Bringing Home Better Birth Outcomes” examines home visiting as a strategy employed by state health agencies to deliver public health interventions aimed at improving birth outcomes. The issue brief, published by the Association of State and Territorial Health Officers (ASTHO) with support from the Maternal and Child Health Bureau, was written to follow-up ASTHO’s “Strides Among States to Improve Birth Outcomes: A Compendium of Programs,” in which several featured states reported using home-visiting programs to reduce infant mortality and disparities in birth outcomes.

Topics include an overview of home-visiting programs; a discussion of goals, target populations, common service components, outcomes, and financing of state-level programs; and examples of programs from Georgia, Maine, Montana, Oklahoma, and Puerto Rico. Home-visiting resources, including state programs featured in the brief, nationally organized home-visiting models, and publications on home visiting, are also provided. The brief is intended for use by states as they continue to address the challenges of reducing infant mortality and preterm birth, maternal and infant morbidity, and disparities in birth and pregnancy outcomes.

The brief is available at: www.astho.org/pubs/HomeVisitingBriefFinal.pdf



American Academy of Pediatrics Recommends Developmental Surveillance at Every Well-Child Visit

“Identifying Infants and Young Children with Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening” provides a strategy to support health professionals in establishing a pattern and practice for addressing developmental concerns in children from birth through age three.

The American Academy of Pediatrics’ policy statement, published in the July 2006 issue of Pediatrics, presents a 10-step algorithm in both text and flowchart formats. Selected steps include eliciting and attending to parents’ concerns, maintaining a developmental history, making accurate and informed observations of the child, identifying the presence of risk and protective factors, and documenting the process and findings.

Information about implementing the tool, such as choosing developmental screening tools, incorporating surveillance and screening in the medical home, and screening payment, is also provided.

The policy statement concludes with a summary and 15 recommendations for the medical home, policy and advocacy, and research and development. The policy statement, intended for use by pediatric health professionals in making developmental surveillance a component of every preventive care visit, is available at:

<http://aappolicy.aappublications.org/cgi/content/abstract/pediatrics;118/1/405?etoc>

Developing Fiscal Analyses and Children’s Budgets to Support ECCS

Developing Fiscal Analyses and Children’s Budgets to Support ECCS offers state Early Childhood Comprehensive System (ECCS) initiatives practical advice on conducting fiscal scans and creating early childhood budgets. This third Project THRIVE Short Take, published by the National Center for Children in Poverty (NCCP) with support from the Maternal and Child Health Bureau, builds on program-by-program background information from NCCP’s Spending Smarter report, as well as on information from a recent report published by the Forum for Youth Investment and the Finance Project. The document begins with a discussion of why fiscal analyses and children’s budgets are important. Using a “how to” approach, the document presents exemplary approaches, tables, and tools highlighting state and local experience in fiscal analysis. The document is available at <http://nccp.org/media/tst06c.pdf>.

Stress During Pregnancy and Low Fetal Weight

The Fetuses of mothers who show high rates of depression, anxiety, and stress weigh less and are smaller than average at midterm, according to a study carried out by researchers from the University of Miami School of Medicine. A total of 98 women of predominantly lower to lower-middle socioeconomic status who were 16 to 29 weeks pregnant were studied from September 1999 to January 2003. The objective of the study was to examine the effects of maternal psychological distress on estimated fetal weight during midgestation and explore the maternal hypothalamic-pituitary axis and sympathoadrenal dysregulation as potential risk factors for these effects.

Maternal emotional distress was assessed using the daily hassles (stress), Center for Epidemiologic Studies–Depression (depression), and State-Trait Anxiety Inventory (anxiety) scales, and fetal weight was estimated from ultrasound biometry measurements. Levels of cortisol and norepinephrine hormones were monitored in urine samples.

“Maternal distress is accompanied by biochemical changes, such as increased cortisol, that can both directly and indirectly affect the fetus,” Miguel Diego, lead researcher said. “Cortisol can directly cross through the placenta into the fetus, which could affect fetal development.”

The researchers found that after analyzing the effects of demographics, maternal distress and hormonal levels, prenatal cortisol was the only significant predictor of fetal weight. Diego said that the mother-fetal interaction is very well protected in most instances. It is only extreme levels of depression and anxiety that can affect the fetus.

Previous findings have shown that women with prenatal depression, anxiety or stress are more likely to deliver premature and low birth-weight babies. While this association has been known clinically, this study is the first one to look at a mother's altered cortisol patterns before birth and show how that affects the baby before it is born.

Maternal Psychological Distress, Prenatal Cortisol, and Fetal Weight. Miguel A. Diego, PhD, Nancy A. Jones, PhD, Tiffany Field, PhD, Maria Hernandez-Reif, PhD, Saul Schanberg, PhD, Cynthia Kuhn, PhD and Adolfo Gonzalez-Garcia, MD

Health Behavior News Service

Source: Psychosomatic Medicine 68:747-753 (2006)



March of Dimes Compendium on Preterm Birth

A new online curriculum that helps health professionals learn to better identify patients at risk for having a premature baby was recently unveiled by the March of Dimes.

“The Compendium on Preterm Birth” is a March of Dimes product developed in partnership with the American Academy of Pediatrics, the American College of Obstetricians and Gynecologists, and the Association of Women's Health, Obstetric, and Neonatal Nurses.

The Compendium, available at www.marchofdimes.com/pretermbirth, is a comprehensive resource of clinical, epidemiological and scientific information about premature birth designed for use by obstetricians, pediatricians, nurses, advance practice nurses, family physicians, residents, and interns. The curriculum can facilitate personal learning or group presentation.

Prematurity Is Root Cause of a Third of U.S. Infant Deaths

Preterm birth is the leading cause of infant mortality in the U.S., according to CDC researchers, accounting for at least a third of all babies' deaths in 2002.

The contribution of prematurity to infant mortality may be twice as high as originally estimated, reported William M. Callaghan, M.D., M.P.H., and CDC colleagues, in the October issue of *Pediatrics*.

They looked at the top 20 causes of infant deaths in the U.S. in 2002, and found that 34 percent of the deaths occurred in preterm infants, 95 percent of whom were born before 32 weeks gestational age and weighed less than 1,500 g (3.3 lb). Two-thirds of the deaths in preterm infants occurred in the first 24 hours of life, the investigators found.

"Efforts to prevent infant deaths attributable to preterm birth require safely delaying birth until a later gestational age, when survival is more likely," the authors wrote. "Therefore, there is an urgent need for an expanded comprehensive agenda to understand the complex social and biological factors that determine susceptibility to preterm birth, to detect women at risk early in pregnancy, and to develop and to evaluate new methods for preventing this important cause of infant death."

Standard methods of estimating infant mortality, using International Classification of Diseases, 10th Revision (ICD-10) codes, have yielded an estimate of 17 percent by this method, the National Center for Health Statistics calculated.

But while this type of classification allows monitoring of trends over time, it "does not capture adequately the overall contribution of preterm birth (less than 37 weeks of gestation) to the national infant mortality rate, because the relationship between preterm birth and death during the first one year of life is not distinctly identifiable by using available cause-

of-death titles," the investigators wrote.

Instead, the CDC researchers developed an approach in which deaths due to conditions that cause premature birth, or result from it, are considered to be the cause of death based on biological factors.

The investigators identified the top 20 leading causes of infant (less than one year of age) death in 2002 using the U.S. linked birth/infant death data set. They assessed the contribution of preterm birth to each cause by determining the proportion of infants who were born preterm for each cause of death, and by considering the biological connection between preterm birth and the specific cause of death.

For example, the category "disorders related to short gestation and low birth weight, not elsewhere classified," which accounted for 4,636 infants deaths in the United States in 2002, was the second largest cause of death overall, and the leading cause of death among preterm children. Not surprisingly, 93.6 percent of all children in this category were preterm.

Of the 27,970 recorded deaths in the linked file for 2002, the 20 leading causes accounted for 22,273 deaths, or 80 percent of all infant deaths. Deaths of preterm infants in the top 20 categories totaled 9,596 (34.3 percent).

The top five causes of death overall listed with their associated ICD-10 category, were:

Congenital malformations, deformations, and chromosomal abnormalities (Q00-Q99), occurring in 5,630 infants, 49.5 percent of whom were preterm. Disorders related to short gestation and low birth weight, not elsewhere classified (P07), occurring in 4,636 infants, 93.6 percent preterm. Sudden infant death syndrome (R95), 2,295 infants, 23.2 percent preterm. Newborn affected by maternal complications of pregnancy (P01) 1,704 children, 91.3 percent preterm. Newborn affected by complications of placenta, cord, and membranes (P02), 1,013 deaths, 87.5 percent in preterm infants.

Among preterm infants, short gestation/low birth weight was the leading cause, followed by maternal complications of pregnancy (incompetent cervix, premature membrane rupture, multiple pregnancy); complications of placenta, cord and membranes (e.g., placenta previa); respiratory distress, and bacterial sepsis.

More than 66 percent of deaths attributable to preterm birth occurred during the first 24 hours of life, and only seven percent occurred after the first four weeks. Deaths most likely to occur within 24 hours of birth were those attributable to short gestation/low birth weight, atelectasis, maternal complications, and cord and placental complications.

"On the basis of this evaluation, preterm birth is the most frequent cause of infant death in the United States, accounting for at least one third of infant deaths in 2002," the authors wrote. "The extreme prematurity of most of the infants and their short survival indicate that reducing infant mortality rates requires a comprehensive agenda to identify, to test, and to implement effective strategies for the prevention of preterm birth."

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Source: *PEDIATRICS* Vol. 118 No. 4 October 2006, pp. 1566-1573 (doi:10.1542/peds.2006-0860)



Calendar Events

November

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2006 Domestic Violence/Sexual Assault Conference, "A Changing Culture, Involving Men, Engaging Communities."

At the Marriott Baltimore/Washington International Airport Hotel.

The Maryland Network Against Domestic Violence and the Maryland Coalition Against Sexual Assault will hold its 2006 biennial, statewide conference, entitled A Changing Culture, Involving Men, Engaging Communities. The focus of this year's all-day conference will be on prevention. Conference speakers will examine and challenge the socio-cultural norms and messages that perpetuate violence against women, present the important role that men must play in changing beliefs, attitudes, and behaviors, and offer opportunities for everyone in the community to get involved in this critical work.

The afternoon session will showcase presenters who have developed innovative approaches, model programs, and best practices that address prevention and focus on the conference's goals.

Additional information about the 2006 conference will be available during the year. For more information about the conference or to become a co-sponsor, vendor or exhibitor, contact the MNADV at 301-352-4574.

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March of Dimes Prematurity Awareness Day

For information on activities go to:

<http://www.marchofdimes.com/printableArticles/home.asp>

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Working with Adolescents and LGBT Issues

National Center for Children and Families, 6301 Greentree Road, Bethesda, \$125, CEUs. 8:30 a.m.—4:15 p.m.

The University of Maryland School of Social Work Office of Continuing Professional Education presents a new workshop designed to meet the training needs of human service professionals

serving children and adolescents.

Working with gay adolescents is a subject not often explored but one that should be. This workshop is designed to take a look at the gay adolescent in today's world and explore homophobia, coming out, at-risk behaviors and clinical practice, and parental and community interventions. This workshop will present and discuss resources, theory, and practical case studies and will be of value to any clinician working with gay issues involving adolescents. Linda Goldman, MS, LCPC, is a certified grief therapist and grief educator in private practice. She is a published author and has just completed a book on young people and LGBT issues. For additional information contact the Office of Continuing Professional Education at 410-706-1839.

January

18

Fetal Alcohol Spectrum Disorders Meeting

Meet at 201 West Preston Street, Room 301, from 12:30–3:00 p.m.

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Breastfeeding Committee Meeting, 9:00–10:30 a.m. at Sinai Hospital, Cancer Institute Room.



Please send all calendar submissions to the editor well in advance in order to get your event published in time.

Send submissions to: perinatalnetwork@livingmind.com